

## System and Method for Preparing Route Maps

### Abstract

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A system and method for making computer-generated maps includes a different scale factor for each road in a route. The scale factors are used to optimize the route map against a target function that considers factors such as the number of false intersections in the route and the number of roads falling below a minimum length threshold. A refinement technique such as simulated annealing is used to find a solution to the target function. Each road in the scaled map is rendered to provide a finished product having the appearance of a hand-drawn map. The finished product includes context roads that intersect the main route but are not part of the main route. Furthermore, the hand-drawn map is optimized to the characteristics of the viewport used to visualize the map.

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